

REPORT

to occupy the academic position:

"Professor"	X
"Associate Professor"	
	one of the academic positions indicated shall be marked with the sign "X"

Candidates to occupy the position:

1	Assoc. Prof.	PhD	Desislava	Staneva	Grabcheva	UCTM
№	academic position	scientific degree	name	middle name	last name	workplace

Scientific area:

5	Technical sciences
code	Name

Professional area:

5.10	Chemical technologies
code	Name

Scientific specialty:

Chemical technology of fibrous materials

The competition has been announced:

23	19.03.2024	Textiles, leather and fuels	Faculty of Chemical and Systems Engineering
in SG issue	date	for the needs of the Department	Faculty

The report was written by:

Prof.	PhD	Rositca	Dimitrova	Nikolova	FCF - SU
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academic position	scientific degree	name	middle name	last name	workplace
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1. Report for the candidate:

Assoc. Prof.	PhD	Desislava	Staneva	Grabcheva
academic position	scientific degree	name	middle name	last name

1.1. Meeting the minimum requirements under the Regulations:

A) The candidate meets the minimum requirements	20 points	X
B) The candidate doesn't meet the minimum requirements	0 points	
		one of the answers given is marked with the sign "X"

<p>It must be filled in if answer B is marked. The publication activity of the candidate is analyzed. The response of the results achieved (quoted) is analyzed.</p> <p>Candidate Assoc. Prof. Dr. Desislava Grabcheva is a co-author of 99 scientific publications, 81 of which are referenced in Scopus. 757 citations registered in Scopus were noticed, where the h-index of Assoc. Prof. Grabcheva is 16.</p> <p>In the competition for professorship, Assoc. Prof. Dr. Grabcheva participated with 45 publications, 41 of which were in refereed and indexed journals in the Scopus or Web of Science databases, 3 publications in non-refereed peer-reviewed journals, 1 publication in a Bulgarian specialized scientific journal and 2 chapters of collective monographs. Of the refereed publications, 11 are in Q1, 23 in Q2, 4 in Q3 and 2 in Q4, which unequivocally indicates a very good level of research. She is also a co-author of the textbook "Textile materials with sensory properties and photodynamic activity", 2024, ISBN 978-954-91951-6-3.</p> <p>According to indicator A1.</p> <p>Candidate Desislava Grabcheva defended her dissertation on the topic "Intelligent textiles with optical sensor properties" in 2008, developed at UCTM - Sofia. (50 points).</p> <p>According to indicator C4.</p> <p>10 scientific publications are presented - 4 in Q1, 4 in Q2 and 2 in Q3. According to this indicator, the candidate exceeds the minimum requirements of 100 points (112.1 points).</p> <p>According to indicator D5 - D8.</p> <p>35 scientific publications and 2 chapters of collective monographs are presented. According to this indicator, the candidate exceeds the minimum requirements of 200 points (328.90 points).</p>
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According to indicator E11.

The minimum requirements for this indicator for UCTM are 100 points, the candidate has submitted 62 citations (620 points), which exceeds the requirements many times.

According to indicator F20.

Dr. Grabcheva is a co-author of a textbook. (20 points), she is the scientific supervisor of a successfully defended PhD student (40 points), participates in 5 and is the head of 2 scientific projects (90 points), with which she secured funds for the implementation of her scientific activity (32 points). The required number points according to this indicator is 100, and Dr. Grabcheva has 182 points.

The analysis of the presented scientific results shows that Dr. Grabcheva not only fulfills, but in most indicators exceeds the minimum requirements of the competition.

1.2. Relevance of scientific and / or applied research:

A) The research is relevant. Part of the research is pioneering (no results are known on the topic by other authors)	8 points	X
B) Research is relevant. Results from other authors are known for each of the topics and / or applications studied.	6 points	
C) Most of the research is relevant, but also some results are presented that have no scientific and / or applied value	4 points	
D) The smaller part of the research is relevant	2 points	
E) Research is not relevant	0 points	
		one of the answers given is marked with the sign "X"

The evaluation of the relevance of the research must be substantiated.

The presented scientific publications are entirely in the field of the scientific specialty for which the competition has been announced. The candidate's scientific research is related to the modification of textile materials for their biomedical and environmental application. Materials with antimicrobial properties, those with virocidal activity and photodynamic antimicrobial activity and textile materials releasing biologically active substances for local skin treatment were obtained and studied. New composite materials of biodegradable polymers have been obtained, including cotton cloth modified with organic and inorganic components, which can be used as adsorbents of oil, petroleum products and dyes. Composite materials with sensor properties for the detection of amines and metal ions in water have also been developed.

The research is current and significant, related to solving important problems for society and has a high potential for application in various fields of medicine and environmental protection. The obtained results can be attributed to the enrichment of the scientific field with new knowledge.

1.3. Objectives of the research:

A) Realistic and of scientific and / or applied interest	8 points	X
B) Realistic, but not of scientific and / or applied interest	4 points	
C) Unattainable (unrealistic)	0 points	
		one of the answers given is marked with the sign "X"

Objectives must be specified. The type of the set objectives must be justified

Realistic goals have been set, appropriate methods for their realization have been selected and the achieved results have a significant scientific contribution and high potential for application.

1.4. Candidate research contributions:

A) With lasting scientific and / or applied response, they form the basis for new research and applications	20 points	X
B) They are of significant scientific and / or applied interest, complete and / or summarize previous research	16 points	
C) They are of scientific and / or applied interest	12 points	
D) Lack of significant contributions	8 points	
E) Lack of contributions	0 points	
		one of the answers given is marked with the sign "X"

Contributions must be specified. The type of results achieved must be justified.

The main contributions of the candidate are related to:

- Obtaining new textile materials with biomedical applications such as antimicrobial and virocidal properties.

- Preparation, characterization and research of textile materials for environmental applications such as oil adsorbents, oil products and dyes.
 - Preparation of textile materials with sensory properties for detecting amines and metal ions in water.
 The candidate's contributions are of significant scientific and applied interest and enrich the achievements in the scientific field.

1.5. Participation of the candidate in the achievement of the presented results:

A) The candidate has at least an equal participation in the submitted papers	8 points	
B) The candidate has at least an equal participation in most of the submitted papers	7 points	X
C) The candidate has a secondary participation in most of the submitted papers	4 points	
D) The candidate participation is unnoticeable	0 points	
		one of the answers given is marked with the sign "X"

Critical notes must be provided if one of the items C or D is marked.
 The candidate's scientific research is of a complex nature, includes various methods for obtaining the research objects, as well as methods for their characterization and the possibilities of their application. Assoc. Prof. Grabcheva's contribution cannot be doubted.

1.6 Pedagogical activity:

A) The candidate has effective and sufficient pedagogical activity at the university. The textbooks issued are modern and useful (they meet the requirements of the Regulations). The work with undergraduate and doctoral students is at a high professional level.	8 points	X
B) The candidate has sufficient pedagogical activity at the university. The textbooks issued satisfy the requirements of the Regulations.	6 points	
C) The pedagogical activity and / or textbooks issued are insufficient (do not meet the requirements of the Regulations)	0 points	

		one of the answers given is marked with the sign "X"
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Critical notes must be provided if one of the items B or C is marked.

1.7. Critical notes:

A) Lack of critical notes	8 points	X
B) Critical notes of a technical nature	7 points	
C) Critical notes that would partially improve the results achieved in a small part of the research	5 points	
D) Critical notes that would partially improve the results achieved in most of the research	3 points	
E) Significant critical notes	0 points	
		one of the answers given is marked with the sign "X"

Critical notes must be provided if one of the answers C, D or E is marked.

1.8. Conclusion

A) The evaluation of the candidate's activity is POSITIVE	This evaluation is assigned to a total number of at least 50 points	X(76 points)
B) The evaluation of the candidate's activity is NEGATIVE	This evaluation is assigned to a total number below 50 points	
		one of the answers given is marked with the sign "X"

To be filled in if requested by the member of the scientific jury

In conclusion, I believe that Assoc. Prof. Dr. Desislava Grabcheva is an established scientist and teacher with excellent theoretical and experimental training and active teaching and learning activities and not only meets, but exceeds all the requirements of the Law for occupying the academic position of Professor of Chemical Technologies of fibrous materials - scientific achievements and teaching activity.

Based on the attached documents, I confidently propose to the members of the honorable Scientific Jury and to the members of the Scientific Council of the University of Chemical Technology and Metallurgy to award the scientific title "Professor" to Assoc. Prof. Dr. Desislava Staneva Grabcheva by professional direction 5.10. Chemical technologies (Chemical technologies of fibrous materials).

26.06.2024	The report was written by:	
date	Prof. Dr. Rositca Nikolova	signature